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Creativity and Mental Health[1,2]

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ABSTRACT

This study specifically investigated the relationship between creativity and mental health.

Forty-seven male undergraduate college students between 18 and 24 years of age were given tape-recorded clinical interviews and a battery of creativity tests. Three experienced clinical psychologists rated each subject's interview on a 4-point mental health scale. Other judges rated the interviews on Rogers' elements of creativity, i.e., (1) Openness to experience; (2) Internal locus of evaluation; (3) Spontaneity. The results were interpreted as empirically supporting the theoretical position that there is a positive correlation between mental health and creativity. Specifically it lends validity to Rogers' postulations concerning the elements which comprise creativity.

CREATIVITY HAS been the subject of hundreds and possibly thousands of articles and books now comprising the psychological literature. Investigations of creative individuals and their work (7, 11) describe the creative person in rather healthy terms. MacKinnon (8, 9) using the California Personality Inventory, reports the creative person as being flexible, independent, and self-accepting. Perhaps the best known empirical studies of creativity has been conducted by Getzels and Jackson (5, 6). These studies found creatives "more stimulus free" and "less categorical" than the non-creative.

A study by Garfield (4) found that creative individuals were healthier and more self-confident. Barron's "originality composite" (1, 2) revealed that the creative individual had personal dominance, with responsiveness to impulse and emotions.

These empirical studies tend to support the notion that creativity, if not a function of, is at least highly related to mental health. A composite description of the creative individual is independent, original, inner-directed, tolerant of uncertainty, intelligent, clever, imaginative, socially effective, dominant, individualistic, self-accepting, achieving, socially independent, and emotionally stable.

Rogers (12) sees the creative personality as positively correlated with the healthy personality. For him the creative person is one who fulfills his potential as a human. Then, of major importance to the view of the relationship between mental health and creativity is Rogers' theory of creativity which offers a significant rationale underlying this relationship. In essence, his view is that creativity involves self-realization, a process requiring three elements. *Extentionality,* or openness to experience, which permits the individual to tolerate ambiguity and relax psychological defensiveness; an *internal locus of evaluation* which allows the creative person to form his own judgment of his products and personal worth; and the *ability to toy with elements and concepts.*

The purpose of this study was to test the hypothesis derived from Rogers' position that a significant relationship will exist between mental health and creativity. This was accomplished by correlating measures of mental health with ratings of Rogers' elements of creativity and scores on some traditional creativity tests.

Method

Subjects

Forty-seven male students at Illinois Institute of Technology, ranging from 18–24 years of age were used as Ss in this study. These students' academic achievement had dropped so low that they had been judged as having had to be dismissed from school for inadequate scholarship. Because of the very high academic requirements for admission to the university in terms of high-school performance and ability measure, the identification of these students as underachievers was assumed. The university's committee on academic standing identified this population. The Ss were given the opportunity to remain enrolled if they would participate in a special psychology program.

This program is described elsewhere (13). Suffice to say, for the purpose of this study that these students participate in a psychodiagnostic procedure and are then placed in diagnostically homogeneous therapy groups. Three diagnostic groups are used: neurotic, Nonachievement Syndrome (behavior disorder), and adolescent reaction. Each of the categories are viewed as fixations at specific developmental stages. The neurotic student is seen as classical oedipal fixations representing approximately the 4–6-year stage. The Nonachievement Syndrome (NAS) is seen as a fixation at the preadolescent latency stage representing the 10–12-year stage. The adolescent reaction is seen as fixations around the adolescent period representing the 13–18-year old level.[3] (More complete descriptions of these pathologies and their relationship to each other and the role of diagnosis in this program for underachievers could be found in a report by Mandel, Roth and Berenbaum (10).) The mental health of these pathological groups is related to the level of fixation. Thus, the neurotic is the least healthy, the NAS is next, and the adolescent reaction is the most. In this study there were 8 neurotics, 29 NAS, and 10 adolescents.

Ratings

1. Mental Health

Based on taperecorded diagnostic interviews, three psychologists made judgments on a 4-point scale of diagnostic category: neurotic, NAS, adolescent reaction, and healthy representing least healthy to most healthy. There was a median agreement of 80 percent among the raters' agreements.

2. Rogers' Elements

The same psychologists rated each subject on Rogers' elements of (1) openness to experience (2) locus of evaluation and (3) ability to toy with elements and concepts. This was done as a pooled rating on a 7-point scale.

Therapists' Ratings

The group therapists who were treating these subjects as part of a different study were asked to make global ratings of creativity on each subject on a 1–7 scale (7 high).

Tests

1. Uses for Things (6)

This test was used to assess "ideational fluency" and "semantic spontaneous flexibility." Subjects were required to name as many different uses as possible for a given common object (e.g. brick). Each S was scored for both originality and productivity of uses. This test appears to have face validity for measuring Rogers' parameter of the ability to toy with elements and concepts. (A 15 minute time limit was imposed.)

2. Barron Welsh Art Scale (3)

This test consists of sixty-two black and white drawings which the subjects were asked to rate (like or dislike). According to Barron artistic preference for the more ambiguous stimuli correlates positively with creativity. Barron has summarized the personality correlates of this scale: Artistic preference is negatively correlated with rigidity, repression, social conformity, and impulse control. This scale has successfully discriminated creative from non-creative artists, architects, writers, etc.

Procedure

At the end of the first semester, 1966–67, all students who agreed to participate in the program met in a group in which the Barron–Welsh and the Uses For Things Test were administered along with other tests used for other studies. During the following week, students were seen, individually in diagnostic interviews by appointment. These were taperecorded. When ratings were completed, correlations were computed to test the hypothesis of the study.

Results and Discussion

Table 1 contains the results of this study. Ratings of mental health correlated positively with both creativity and mental health. This finding empirically supports Rogers' contentions that the creative person is open to experience, has an internal locus of evaluation, and has the ability to toy with elements and concepts. The finding also supports the hypothesis of a positive relationship between creativity and mental health.

Only one of the creativity tests, the Barron Welsh Art Scale, correlated significantly with the ratings of mental health. The fact that this test also correlated significantly with the other creativity variables further supports the hypothesis.

Therapists' ratings of creativity were significantly correlated with ratings of mental health. These ratings correlated positively, although not significantly with the other creativity variables, tending to further support the hypothesis.

Table 1.—Correlations (Rho) Between Psychologists' Ratings of Mental Health and Creativity Variables

Creativity Variables	Ratings of Mental Health
Openness to Experience	.85†
Locus of Evaluation	.83†
Ability to Toy with Elements	.83†
Therapists' Ratings of Creativity	.48†
Original Uses Test	.17
Different Uses Test	.10
Barron Welsh	.44†

†.01 level of confidence.

The Uses Test had low positive correlation with ratings of mental health. This test, a measure of cognitive functioning, was the only criterion of creativity that did not correlate significantly with mental health ratings. This study indicates that the dynamic aspects of creativity have a much higher relationship with ratings of mental health than do the cognitive aspects of creativity.

In summary, these internally consistent findings lend validity to Rogers' theory of creativity and support the hypothesis of a positive relationship between creativity and mental health.

Summary

This study was designed to test the hypothesis that creativity is positively correlated with mental health.

The sample consisted of forty-seven male underachieving college students. All Ss were rated and tested on various aspects of creativity and mental health.

It was found that a series of creativity tests and ratings were internally consistent and that each creativity variable was positively and in most cases significantly correlated with ratings of mental health.

FOOTNOTES

1. This study was supported by a grant from the Esso Education Foundation—SPUR Project.
2. The study was part of a PhD Dissertation at Illinois Institute of Technology by the senior author under the direction of the third author.
3. This developmental position is described more completely in Roth, R. M., Berenbaum, H. L., and Hershenson, D. H. "The Developmental Theory of Psychotherapy: A Systematic Eclecticism," unpublished paper, Illinois Institute of Technology, 1967.

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